

CLAIMS

What is claimed is:

- 1 1. An integrated tracing and logging system employed within a network comprising:
 - 2 a tracing module associated with specified program code regions of an application,
 - 3 the tracing module to receive and process tracing method calls generated by the application
 - 4 when the specified program code regions are executed;
 - 5 a logging module associated with specified categories related to the network, the
 - 6 logging module to receive and process logging method calls from network components
 - 7 associated with the categories;
 - 8 an output destination to receive a message from at least one of the tracing module and
 - 9 the logging module; and
- 10 a formatter to determine a message format for the received message.
- 1 2. The system of claim 1, wherein the formatter is one of a list formatter, a human-readable formatter, and a markup language formatter.
- 1 3. The system of claim 1, wherein one or more properties of the formatter are defined in
2 a configuration file.
- 1 4. The system of claim 3, wherein the configuration file includes an identifier to identify
2 the formatter.
- 1 5. The system of claim 3, wherein the one or more properties are formatted as key-value-pair properties, each key-value pair having a key to specify an attribute and a value to
3 provide a definition for the specified attribute.

1 6. The system of claim 3, wherein the configuration file defines the message format for
2 the received message, the message format including one or more fields.

1 7. The system of claim 6, wherein the one or more fields of the message format includes
2 at least one of
3 a timestamp field to indicate a time for the received message;
4 a location of origin field to indicate a source of the received message;
5 a thread identifier field to indicate a thread associated with the received message;
6 a message severity indicator field to indicate a severity level of the received message;
7 and
8 a message identifier field to identify the received message.

1 8. The method of claim 1, wherein the output destination is at least one of
2 a trace file; and
3 a log file.

1 9. The method of claim 1, wherein the output destination is a console.

1 10. A computer-implemented method employed within a network comprising:
2 creating an instance of a tracing controller associated with specified program code
3 regions of an application, the tracing controller instance to receive and process tracing
4 method calls generated by the application when the specified program code regions are
5 executed;
6 creating an instance of a logging controller associated with specified categories
7 related to the network, the logging controller to receive and process logging method calls
8 from network components associated with the categories;

9 specifying an output destination to receive a message from at least one of the tracing
10 controller instance and the logging controller instance; and
11 selecting a formatter to provide a message format for the received message, wherein
12 the message format is defined based, at least in part, on a configuration file.

1 11. The method of claim 10, further comprising:
2 configuring the message format for the selected formatter.

1 12. The method of claim 11, wherein configuring the message format comprises
2 providing an identifier to the configuration file to identify the selected formatter.

1 13. The method of claim 12, wherein configuring the message format further comprises
2 specifying one or more fields for the message format.

1 14. The method of claim 13, wherein specifying one or more fields comprises specifying
2 at least one of
3 a timestamp field to indicate a time for the received message;
4 a location of origin field to indicate a source of the received message;
5 a thread identifier field to indicate a thread associated with the received message;
6 a message severity indicator field to indicate a severity level of the received message;
7 and
8 a message identifier field to identify the received message.

1 15. The method of claim 10, further comprising:
2 providing a filter to the specified output destination to selectively filter the message.

1 16. A system comprising:

2 a means for creating an instance of a tracing controller associated with specified
3 program code regions of an application, the tracing controller instance to receive and process
4 tracing method calls generated by the application when the specified program code regions
5 are executed;

6 a means for creating an instance of a logging controller associated with specified
7 categories related to the network, the logging controller to receive and process logging
8 method calls from network components associated with the categories;

9 a means for specifying an output destination to receive a message from at least one of
10 the tracing controller instance and the logging controller instance; and

11 a means for selecting a formatter to provide a message format for the received
12 message, wherein the message format is defined based, at least in part, on a configuration
13 file.

1 17. The system of claim 16, further comprising:

2 a means for configuring the message format for the selected formatter.

1 18. The system of claim 17, wherein the means for configuring the message format
2 comprises:

3 a means for specifying one or more fields for the message format.

1 19. The system of claim 18, wherein the means for specifying one or more fields
2 comprises a means for specifying at least one of

3 a timestamp field to indicate a time for the received message;

4 a location of origin field to indicate a source of the received message;

5 a thread identifier field to indicate a thread associated with the received message;

6 a message severity indicator field to indicate a severity level of the received message;

7 and

8 a message identifier field to identify the received message.

1 20. An article of manufacture comprising:

2 an electronically accessible medium providing instructions that, when executed by an
3 apparatus, cause the apparatus to

4 create an instance of a tracing controller associated with specified program code
5 regions of an application, the tracing controller instance to receive and process tracing
6 method calls generated by the application when the specified program code regions are
7 executed;

8 create an instance of a logging controller associated with specified categories related
9 to the network, the logging controller to receive and process logging method calls from
10 network components associated with the categories;

11 specify an output destination to receive a message from at least one of the tracing
12 controller instance and the logging controller instance; and

13 select a formatter to provide a message format for the received message, wherein the
14 message format is defined based, at least in part, on a configuration file.

1 21. The article of manufacture of claim 20, wherein the electronically accessible medium
2 provides further instructions that, when executed by the apparatus, cause the apparatus to
3 configure the message format for the selected formatter.

1 22. The article of manufacture of claim 21, wherein the instructions that, when executed
2 by the apparatus, cause the apparatus to configure the message format for the selected
3 formatter cause the apparatus to provide one or more fields for the message format.

1 23. An apparatus comprising:

2 an application; and

3 a processor and logic executable thereon to
4 create an instance of a tracing controller associated with specified program
5 code regions of the application, the tracing controller instance to receive and process tracing
6 method calls generated by the application when the specified program code regions are
7 executed;

8 create an instance of a logging controller associated with specified categories
9 related to a network, the logging controller to receive and process logging method calls from
10 network components associated with the categories;

11 specify an output destination to receive a message from at least one of the
12 tracing controller instance and the logging controller instance; and

13 select a formatter to provide a message format for the received message,
14 wherein the message format is defined based, at least in part, on a configuration file.

1 24. The apparatus of claim 23, wherein the selected formatter is one of a list formatter, a
2 human-readable formatter, and a markup language formatter.

1 25. The apparatus of claim 23, wherein the configuration file includes an identifier to
2 identify the formatter.

1 26. The apparatus of claim 23, wherein the processor and logic executable thereon further
2 comprises:

3 a processor and logic executable thereon to configure the message format for the
4 selected formatter.

1 27. The apparatus of claim 26, wherein the processor and logic executable thereon to
2 configure the message format comprises a processor and logic executable thereon to
3 specify one or more fields for the message format.

1 28. The apparatus of claim 27, wherein the processor and logic executable thereon to
2 specify one or more fields for the message format comprises a processor and logic executable
3 thereon to specify at least one of
4 a timestamp field to indicate a time for the received message;
5 a location of origin field to indicate a source of the received message;
6 a thread identifier field to indicate a thread associated with the received message;
7 a message severity indicator field to indicate a severity level of the received message;
8 and
9 a message identifier field to identify the received message.